

ALARM AND CONTROL SYSTEM FOR A SWITCH CABINET

Patent Claims

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1. An alarm and control system for at least one switch cabinet that can be opened and closed by an operator, whereby the switch cabinet comprises an electronically functioning locking unit (17) for closing and releasing the switch cabinet door lock and
10 whereby there is provided a plurality of modules (12, 13, 14, 15, 16) connected via a data bus (11) serving to provide exchanges of information and each having a respective microprocessor for signal processing and a closed loop function scope, the modules processing independently of one another the signals conducted thereto and outputting a decision signal as the processing result.
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2. A system in accordance with claim 1, by which a plurality of switch cabinets (10) are connected with one another via the data bus (11) and, in each of the switch cabinets (10), modules (12, 13, 14, 15, 16) with closed loop function scopes are arranged whose decision signal is transmittable to the subsequently-operating modules of different switch cabinets (10).

3. A system according to claim 1 or 2, by which at least one operator module (12) connected to an input keyboard is provided.

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4. A system according to one of the claims 1–3, by which at least one input module (14) connected to an input unit configured as an optical sensor or as a transponder device is provided.

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5. A system according to one of the claims 1–4, by which at least one grip module (13) controlled as a function of the locking unit (17) for the door lock is provided.

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6. A system according to claim 5, by which a plurality of door locks configured on the switch cabinets (10) are connected to the grip module (13).

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7. A system according to claim 5, by which a plurality of further locking units (17) that are coupled to other switch cabinets (10) via the data bus (11) are connected to the grip module (13) of a switch cabinet (10).

8. A system according to one of the claims 1–7, by which at least one communication module (16) communicating with external communication devices is provided.
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9. A system according to one of the claims 1–8, by which at least one control module (15) for controlling the energy supply of the module (12, 13, 14, 16) and/or the locking units (17) is provided.
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10. A system according to one of the claims 1–9, by which at least one sensor module connected with sensors for capturing environmental influences produced on or in a switch cabinet is provided.
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11. A system according to claim 10, by which each sensor operable to capture a defined environmental influence is provided with its own sensor module.
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12. A system according to one of the claims 1–11, by which an externally arranged databank is connected to the data bus (11).